



CORTADA

SCIENCE ART ACADEMY

— AT PINECREST GARDENS —



PRESENTED BY
PINECREST GARDENS AS PART
OF THE VILLAGE OF PINECREST'S
EDUCATIONAL PROGRAMMING



ABOUT CORTADA SCIENCE ART ACADEMY

LEADERSHIP. CREATIVITY. EMPATHY. SCIENCE.

THE ACADEMY

Cortada Science Art Academy at Pinecrest Gardens teaches students how to think, imagine, and problem-solve while caring for the environment. Developed by **Xavier Cortada**, renowned eco-artist and Pinecrest Gardens' Artist-in-Residence, this immersive, outdoor after-school program aims to develop engaged citizens who use art and science to better understand our world, connect with others, and address environmental concerns.

Students dive deep into Cortada's science art practice to discover how they can use the power of art to spur social and environmental action. Through engaged studio sessions and presentations at Pinecrest Gardens' Hammock Pavilion, students will learn how to use creativity and leadership to help conserve Florida's ecosystems, defend global biodiversity, and advance the work of climate scientists at the Earth's poles.

Presented by Pinecrest Gardens, as part of the Village of Pinecrest's educational programming, the Academy offers three **weekly after-school programs tailored to different age groups (Grades 3-5, 6-8, and 9-12).**



LEARN MORE AND REGISTER AT
WWW.CORTADAACADEMY.ORG

MODULE ONE

DEFEND BIODIVERSITY USING SCIENCE ART

In a journey through the Earth's past, present, and future, students discover their interconnectedness with all life on the planet and the role that they play in either defending or destroying it. Throughout this 5-week module students will learn how science allows us to understand the natural world, why the climate is rapidly changing, and how Cortada uses art to inspire action.

INTERCONNECTEDNESS

Week 1 lays the foundation for the rest of the semester by helping students to fully realize their relationship with all life on Earth. With a focus on science, empathy, and leadership, this week aims to motivate students to be changemakers in their communities.

JOURNEY THROUGH TIME

Week 2 takes students on an exploration through our planet's history, dating back to approximately 4.6 billion years ago when the Earth was formed. From the Cambrian explosion to the dawn of the dinosaurs to the digital age, this week gives students the background to better understand what's happening in the world today.

FLORIDA'S ENDANGERED ANIMALS

Week 3 presents students with the defining issues of our time – climate change and environmental degradation, with a particular emphasis on our state. As greenhouse gas emissions soar and a pandemic rages, students learn how a world impacted by humans continues to affect the livelihood of species including our own.

ENDANGERED WORLD: WESTERN HEMISPHERE

Week 4 explores how human activities in the Western Hemisphere have contributed to the Earth's sixth mass extinction. Deforestation in the Amazon, fracking in Canada, and urban sprawl in America are a few examples used to provide a global perspective and spur innovative artistic interventions.

ENDANGERED WORLD: EASTERN HEMISPHERE

Week 5 explores how human activities in the Eastern Hemisphere have contributed to the Earth's sixth mass extinction. Plastic pollution in China, poaching in Sub-Saharan Africa, and overfishing in the Mediterranean Sea are a few examples used to provide a global perspective and spur innovative artistic interventions.



See schedule and pricing at www.cortadaacademy.org.

MODULE TWO

CONSERVE FLORIDA'S FRAGILE ECOSYSTEMS

Exploring the importance of Florida's ecosystems, from coral reefs and the Everglades to mangrove forests and wildflower meadows, students use art and science to engage in conservation. In this 5-week module students learn from Cortada's eco-art practice to understand and express complex ideas, develop essential leadership skills, and foster hope in the fight to protect our local environment.

RESTORING THE EVERGLADES

Week 1 focuses on a local ecosystem that is not found anywhere else on Earth - the River of Grass. Students will learn about the Everglades' threatened and endangered species, the tiny water-bound organisms that reveal secrets about our past, and how to use art to advance restoration efforts.

PROTECTING SEAGRASSES AND CORALS

Week 2 introduces students to enchanting coral reefs and misunderstood seagrass beds, some of the most productive and delicate ecosystems on the planet. As students examine life beneath the waves, they learn how to engage their friends and families in tackling the biggest challenges facing our coastal marine environments.

REFORESTING MANGROVES

Week 3 transports students into the critical mangrove forests that defend our shoreline from storm surges and pull carbon dioxide out of the air. In the process of learning about how Cortada created Miami's longest-lasting mangrove reforestation initiative, students discover how they can help their communities to plan and plant for a future with rising seas.

REGROWING OUR NATIVE TREE CANOPY

Week 4 draws attention to the wilderness that has disappeared due to a century of rapid development. Students will learn about the tremendous ecosystem services provided by our native tree canopy and how they can lead the way in reversing humanity's destructive practices.

PLANTING WILDFLOWERS

Week 5 brings students to the year 1513 when Juan Ponce de Leon landed on our coast and named it "La Florida" - from "flor," the Spanish word for flower. Students will reflect on those who have shaped Florida's history, learn about the need to protect our pollinators, and then help to shape Florida's future by regrowing the wildflowers that our state was named after.



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MODULE THREE

DISCOVER THE NORTH AND SOUTH POLES

Cortada created art at the North and South Poles to address environmental issues at every point in between. During this five-week module, students travel to the ends of the Earth to learn about the melting Arctic and Antarctic, the perseverance of its explorers and scientists, and the power of art to reframe our thinking. Using Cortada's polar art, participants will better understand global climate change, practice empathy, and problem-solve for a future with rising seas.

POLAR SCIENTISTS & EXPLORERS

Week 1 honors and celebrates the dedication of the men and women who have devoted their lives to the pursuit of knowledge in some of the most hostile environments on Earth. As students learn about the determination, leadership, and creativity of these polar pioneers, they are encouraged to embrace those values in the ongoing effort to move humanity forward.

MAKING A POINT AT THE ENDS OF THE WORLD

Week 2 takes students to the Earth's poles to develop empathy and compassion for everyone and everything living across every longitude. With projects that aim to diminish the distance between us and our global neighbors, students recognize the scale of the problems at hand and work to serve those who will be impacted the most.

THE NORTH POLE

Week 3 investigates the connection between the Arctic and the world below. In this week, students learn how conceptual art pieces, such as Cortada's "North Pole Dinner Party," can motivate participants to care for the melting Arctic ice as if it were part of themselves.

THE SOUTH POLE

Week 4 investigates the connection between Antarctica and the world above. In this week, students learn about Cortada's collaborations with Antarctic scientists and how art can be used to extend scientific findings to the broader public.

SEA LEVEL RISE

Week 5 concludes the semester by looking at what melting polar ice and sea level rise will mean for the future of South Florida. Students will learn from some of Cortada's previous projects, such as the "Underwater HOA," so they can become change agents and problem-solvers in their own communities.



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THE ARTIST

Xavier Cortada serves as Artist-in-Residence at Pinecrest Gardens, where his studio, gallery and socially engaged art practice are based. He developed the curriculum for the Cortada Science Art Academy at Pinecrest Gardens by distilling lessons from three decades of art-making across six continents.

Cortada has created art installations at the North Pole and South Pole to address environmental concerns at every point in between. He has developed numerous collaborative art projects globally, including peace murals in Cyprus and Northern Ireland, child welfare murals in Bolivia and Panama, AIDS murals in Geneva and South Africa, and eco-art projects in Hawaii, New Hampshire, Taiwan, Holland, and Latvia.

The artist has been commissioned to create art for the White House, the World Bank, Pinecrest Village Hall, Miami City Hall, Miami-Dade County Hall, Florida Botanical Gardens, the Miami Art Museum, Museum of Florida History, Miami Science Museum and the Frost Art Museum.

Cortada is in the collections of the Perez Art Museum Miami (PAMM), the NSU Museum of Art in Ft. Lauderdale, the Whatcom Museum, the Frost Art Museum, the MDC Museum of Art + Design and the World Bank.

Cortada is Professor of Practice at the University of Miami Department of Art and Art History and Chair of the Miami-Dade Cultural Affairs Council. He grew up in Miami and holds undergraduate, graduate and law degrees from the University of Miami.



THE INSTRUCTOR

As the Academy's lead instructor, Adam Roberti will guide students through lessons imparted by Cortada's science art practice so they can discover how to use the power of art to make change in their communities. Roberti also serves as Cortada's studio manager, overseeing the implementation of Cortada's participatory eco-art practice in Miami-Dade County, including projects such as Plan(T), Underwater HOA, and the Miami Corona Project.

In 2019, Roberti worked with local schools, libraries, the Frost Science Museum, and Pinecrest Gardens to have thousands of residents plan for a future with sea level rise by planting mangrove propagules in their yards. He led the Cortada's team in raising awareness and inspiring action on climate change at every county library branch and weekly at the Pinecrest Gardens Farmers Market.

Roberti has trained art teachers at the 2019 MDCPS' STEAM Professional Development Session and science teachers with UF's Scientist in Every Florida School program. He has also shared his expertise through workshops for the National Wildlife Federation, the CLEO Institute, the Everglades Foundation, and as a guest lecturer at the University of Miami.

Prior to working with Cortada, Roberti received a Bachelors of Arts in Ecosystem Science and Policy and a Masters of Environment, Culture, and Media from the University of Miami. He formerly held a research position in Miami-Dade County's Sea Turtle Conservation Program and teaching positions at the Marjory Stoneman Douglas Biscayne Nature Center in Key Biscayne and Island Dolphin Care in Key Largo.





Xavier Cortada facilitates a student performance of the Longitudinal Installation at Pinecrest Gardens, activating the replica of his original art installation at the South Pole.



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Cortada Science Art Academy
Pinecrest Gardens, South Florida's Cultural Arts Park, presents
Cortada Science Art Academy at Pinecrest Gardens as part of
the Village of Pinecrest's educational programming.
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